

VICTORIA.

PROGRESS REPORT

OF THE

ROYAL COMMISSION ON STATE FORESTS AND
TIMBER RESERVES

ON THE

VICTORIA FOREST:

ITS RESOURCES, MANAGEMENT, AND CONTROL.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY HIS EXCELLENCY'S COMMAND.

By Authority :

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THE VICTORIA FOREST.

PROGRESS REPORT.

*To His Excellency the Right Honorable THOMAS, BARON BRASSEY, Knight
Commander of the Most Honorable Order of the Bath; Governor and
Commander-in-Chief in and over the Colony of Victoria and its
Dependencies, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

We, the members of the Royal Commission appointed to investigate the general question of forestry and forest control and management in Victoria, have the honour to present the following Progress Report :—

THE VICTORIA FOREST.

Area and Boundaries.

This forest, extending from Nar-be-thong on the north-west to Mount Baw Baw on the south-east, lies chiefly in the county of Evelyn, between the Great Dividing Range and the Beenak Range; it embraces the principal watershed of the Upper Yarra and its tributaries, and contains an area in that county of 192,000 acres. On the northern slopes of the Dividing Range, and within the county of Anglesey, there is an additional area of 36,900 acres, and in the south-western part of Wonnangatta, 2,200 acres, or 231,100 acres in all.

On the southern watershed of the Beenak Range, in the county of Buln Buln, there are two adjacent forest blocks of 80,000 and 40,000 acres respectively, and in the neighbouring county of Tanjil a further block of 38,000 acres, which the Surveyor-General and the Inspector of Forests recommend should be added to the main reserve. North of the Dividing Range, in the county of Anglesey, two other blocks between the Murrindindi River and an unnamed range running from Mount Arnold to the head waters of the Jerusalem River, and containing an area of 146,000 acres, are also scheduled for permanent reservation by these officers. We have not yet had an opportunity of examining the proposed extensions of the forest in the three counties mentioned, and, as they contain a fair proportion of land which is placed in the 2nd or "Agricultural and Grazing" class, we have decided to make no recommendations as to their reservation until after we have inspected them.

On the western side of the main reserve, in the parishes of Yuonga, Warburton, and Beenak, there is a considerable area of unappropriated Crown land covered with valuable timber, which in the public interest should be added to the permanent forest. The configuration of the land in these parishes is extremely rugged and broken, the steep hills being clothed to their summits with dense forest growth, while in the valleys below numerous small streams flow to join the Yarra and its principal affluents. The geological formation in the parish of Warburton is chiefly granitic, and on the subsoil of decomposed granite there is a thin covering on the slopes of vegetable soil or humus. There could scarcely be a more unpromising place for close settlement, yet some years ago a large number of allotments, ranging mostly from 15 to 20 acres, were surveyed and made available for annual occupation licences under the 65th section

of the Land Act. In very few cases have the allotments selected been continuously occupied, and in still fewer have the Crown rents been regularly paid. As the land is to a large extent unsuitable for agricultural occupation—while, in addition to being covered with excellent timber, it forms the watershed of numerous small streams—we are of opinion that the greater part of these allotments should be withheld from settlement and reserved. Apart altogether from the question of conserving the growth of timber in this mountainous district, it would be very unwise to permit lands within the watershed of one of the most important rivers of the colony to be divided into small allotments and stripped of their forest cover. The ring-barking or clearing of the forest trees and the destruction of the undergrowth on the hillsides would give full play to the heavy rain-storms which sweep over this region, and probably result in land-slides and the erosion of the soil on the slopes as well as seriously affect during the dry season the flow of the small streams in the valleys. The approximate area of the best Crown timber lands in the three parishes mentioned is 35,700 acres, and the boundaries of the several blocks are shown on a plan of the county of Evelyn marked B, now in our possession.

Beyond the northern boundary of the forest in the county of Anglesey, and in the parishes of Woodbourne and Granton, there are a number of abandoned or unoccupied grazing areas about 24,400 acres in extent, and covered with good milling and splitting timber, which in our opinion should also be withheld from occupation and reserved. These lands form part of the watershed of the Yea and Acheron Rivers, and the same cogent reasons which forbid the alienation of mountainous territory in the county of Evelyn apply to them. Their boundaries are shown on a county plan marked C, submitted to us by the Surveyor-General and the Inspector of Forests.

The total area of Crown timber lands in the counties of Evelyn, Anglesey, and Wonnangatta at present scheduled as the Victoria State Forest under the Land Act, but not permanently reserved as such, is 111,621 acres. The approximate total area which we desire to see protected from alienation, and which we therefore strongly recommend should be permanently reserved, with as little delay as possible, under section 10 of the *Land Act* 1890, is as follows:—

<i>Yarra watershed—</i>				Acres.
County of Evelyn, main forest	...	...	...	192,000*
" " forest lands in parishes of Yuonga, Warburton, and Beenak	...	...	...	35,700
<i>Yea and Acheron watershed—</i>				
County of Anglesey, part of main forest	...	...	...	36,900
" " forest lands in parishes of Woodbourne and Granton	...	...	...	24,400
County of Wonnangatta	...	...	...	2,200
Total				291,200

The Timber Supplies.

The timber in this forest is of an exceedingly valuable kind. Immense belts of mountain ash, messmate, grey or spotted gum (*E. goniocalyx*), and whitegum clothe the hill slopes and valleys, while blackwood, beech, sassafras, silver wattle, and musk are interspersed among the high forest trees in the creek flats. Mountain ash and messmate are largely used for palings and mining laths. The former especially is in great request on the central gold-fields for laths, but owing to the bad roads the contractors are not able to fulfil all their orders at present. The grey or spotted gum is chiefly cut by saw-millers, and is greatly prized for coachbuilders' and wheelwrights' work, as in hardness, toughness, and durability it is, in the opinion of many authorities, equal to the bluegum (*E. globulus*), for which it is frequently sold and accepted by the trade. This fine timber is now cut by the saw-millers at Toolangi in the north-western part of the forest, and delivered in Melbourne, freight paid, at 10s. per 100 super. feet, the ordinary hardwoods, such as messmate, fetching 7s. per 100 feet.

*Of this area 114,000 acres appear to be temporarily reserved for future water supply purposes.

Yarra Glen, on the Healesville Railway, 31 miles from Melbourne, is now the loading station for timber cut in the Toolangi district, and from a return furnished by the Railway Department it appears that during the period 1st July to 31st October last the following consignments were made from that point :—

			Tons.		Revenue.
Sawn timber	...	...	213	...	£76
Palings	...	...	210	...	69
Mining laths	...	...	48	...	26
			<hr/>		<hr/>
			471		£171
			<hr/>		<hr/>

The bad state of the local roads during the winter and early spring, and the great difficulty of cartage, is shown by the fact that during the period 1st to 23rd November, a little over three weeks, no less than 156 tons of laths were sent from the same station to the Carisbrook and Bet Bet district mines, or more than three times the quantity sent during the previous four months.

Lilydale is now the principal loading station for timber from the Warburton district, and Healesville, the terminus of the line, for consignments from the neighbourhood of the Black Spur. The tonnage of the timber sent from these two stations during the four months ending on 31st October last is as follows :—

	Lilydale.			Healesville.	
	Tons.	Revenue.		Tons.	Revenue.
		£			£
Sawn timber	...	—	...	265	50
Palings	...	30	...	202	60
Laths	...	—	...	—	—
Firewood	...	140	...	578	98
		<hr/>		<hr/>	<hr/>
		170		1,045	£208
		<hr/>		<hr/>	<hr/>

The revenue shown above represents the total railway freight received for the consignments, the comparative smallness of which from Lilydale is accounted for by the long road cartage of palings, and the fact that but one small mill is yet at work in the Warburton district. Sawn timber and palings are sent from the forest to several of the large inland towns as well as to the metropolis, while the laths are consigned to various towns in the central mining district, upwards of 100 miles from Melbourne.

The importance to the State railways of the timber traffic in the principal mining districts is shown by the fact that, during the year which ended on the 30th of June last, 135,700 tons of firewood and 14,200 tons of sawn and hewn hardwood, including props, poles, and laths, were received at the several Bendigo goods sidings, the freight revenue obtained being £23,746. At Ballarat, 70,090 tons of firewood and 12,280 tons of sawn and hewn hardwood were received during the same period, the freight on the consignments being £13,007.

All the evidence obtained by us in the central mining district points to a serious and increasing shortage of local timber supplies. The reserves in the neighbourhood of Bendigo, 140,000 acres in extent, are stripped of mature timber, cutting being now confined to props and firewood. In addition to the supplies which are brought by railway, fuel is carted a distance of 15 to 20 miles to the city, the annual requirements of the whole mining district being estimated at 250,000 tons. Large quantities of slabs and props are also used every year in the mines. Witnesses with good knowledge of local conditions have expressed an opinion that in a few years the district supplies of firewood will be completely exhausted, and that mining companies and householders will then have to look to distant forests for wood fuel, or have recourse to coal. The state of affairs at Ballarat is but little better. The failure of lath supplies from Bullarook and Wombat reserves is severely felt, and already some companies are obtaining this class of timber from the Otway, Toolangi,

and West Gippsland reserves. The mining prop supplies are also failing, and, while inferior in strength, cost more than in former years. Even the firewood used for steaming purposes is, it is said, so inferior in quality that it has to be mixed with coal.

It is in the extensive alluvial areas, however, such as the Maryborough and Creswick districts, that the greatest consumption of mining timber takes place. In addition to firewood for the engines, enormous quantities of props and laths are used for the underground workings. In one mine alone at Carisbrook the consumption last year was set down at 4,000 tons of firewood, 24,000 feet of 8-in. and 10-in. props, 120,000 feet of 6-in. props, 120,000 panelling props, and 300,000 laths.

Taking the whole of the central district, the increase in the cost of mining timber during the past five years ranges from 5 to 15 per cent.—one witness stating it as 20 per cent. The price of laths has risen from 1s. 6d. to 2s. 6d. per 100, props from 6 to 10 per cent., and slabs (Bendigo district), 5 per cent.

The general scarcity indicated by this increase in prices, and the exhausted condition of Wombat Forest, show how necessary it is to offer every reasonable inducement to purchasers to obtain their supplies from new sources. The opening of the Victoria reserves will greatly relieve the present demands on Wombat Forest, and enable steps to be taken for its protection and improvement. There are large quantities of deadwood in the latter, and this material, with the green timber to be obtained by thinning-out or improvement fellings, should for a time meet the threatened scarcity of firewood at Bendigo.

Transport.

One of the matters referred to us under our Commission is the question of opening up forests by better means of communication. On the western side of Victoria Forest sawn timber has at present to be carted a distance of 12 to 14 miles, and mining laths, palings, and other split timber 13 to 18 miles, to Yarra Glen. The cost of cartage to the railway station is, for sawn timber, from 2s. 6d. to 4s. per 100 feet super., the railway freight thence to Melbourne being about 11d. per 100 feet. For the transport of laths the carriers charge 3s. 6d. to 4s., and for palings 2s. to 3s. per 100. All this timber has to be hauled to the main road over wretched bush tracks, and, considering the broken nature of the country and the heavy average rainfall which renders them impassable in winter, it is little wonder that carting can only be carried on during five or six months of the year. The difficulty in getting out timber from the splitting grounds during the wet season, and the consequent intermittent supply of laths, slabs, &c. (as well as palings), is likely to seriously hamper the development of alluvial mining in the central district, unless a better means of transport between the forest and the local railway can be provided. Some years ago a trial survey of a branch line to serve the Toolangi district was made, the route chosen crossing the watershed of the main Dividing Range and terminating at Yea. The residents of Toolangi state that if a railway were constructed to a point in the parish of Tarrawarra North, about 9 or 10 miles from Yarra Glen, it would fairly serve the agricultural settlement in the valleys, and at the same time enable enormously large supplies of timber to be consigned throughout the year from the forest. To properly open this fine reserve to timber-getters, a light and inexpensive railway or tramway is necessary, and, as it is stated that a fairly good grade can be obtained either from Yarra Glen or from a point near Healesville to the parish of Tarrawarra North, we think that both routes should be examined without delay by the construction engineers of the Railway Department, with a view to the Government being placed in possession of fuller information respecting the capital cost and probable traffic of a line to the forest.

The same disadvantage of road carriage impedes the development of the timber trade in the Warburton and Upper Yarra reserves, the distance by road from Warburton to Lilydale, the principal loading station, being 25 miles, and the material sent down at present being chiefly split timber, such as palings. For some time past the construction of a railway has been under consideration, and the route recommended by the Railways Standing Committee is from Lilydale *via* Seville, Woori Yallock, and Yarra Junction to Warburton, the length being 23.02 miles. Owing to extensive agricultural settlement in the district, there is a fair prospect of such a line having a considerable general traffic, but for a long time to come the most

important freight will be sawn timber, mining timber, such as laths, slabs, props, and poppet legs, beams, decking for wharf and jetty construction, and fencing material, and in deciding on the type of line to be built due weight will doubtless be given to this fact. In view of the mileage involved, it is essential that the timber required for the gold-fields should be transported from the forest to the mines at as low rates of carriage as possible.

The opening of an extensive forest, such as the Victoria reserves, by means of railway communication, will not only enable larger quantities of first-class sawn timber and fencing material to be supplied to the Metropolitan district, but will also enable the mining companies in the central district to obtain regular consignments of laths, slabs, props, &c., throughout the year. The railway mileage from Warburton to Melbourne will be 47, to Ballarat 121, to Bendigo 148, and to Maryborough 159. The suggested branch line to Toolangi being about 10 miles in length, the distance from that point to Melbourne and to the mining centres named would be about 6 miles less in each case.

Management and Control.

Taking into consideration the wide distribution of valuable hardwood trees, such as greygum, mountain ash, and messmate, the immense belts of mature timber with which the hill slopes and ravines are clothed, and its situation within 50 to 60 miles of Melbourne, whence timber can be sent by railway to any of the central gold-fields or large towns, such as Ballarat, Bendigo, Maryborough, or Castlemaine, we are of opinion that this is one of the most valuable forests in the colony, and one which should be managed on a very different plan from that applied to Wombat and Bullarook in the past, if the errors in over-cutting and the extravagant waste which have led to the present scarcity of mature timber in those reserves are to be avoided.

Along the watersheds of the Main Dividing Range and its spurs, where splitting is chiefly carried on, there is practically no supervision over timber-getters. The Conservator at present depends on the assistance of the local mounted police, who are expected to see that every person cutting in the forest is duly licensed, and in the performance of this duty occasionally patrol part of the reserves. In the absence of supervision by a competent forest officer an enormous waste of valuable timber has gone on for many years unchecked. The most destructive agents are the paling-splitters, who, in addition to felling hundreds of trees which they leave on the ground untouched, owing to their not being sufficiently free in the grain, or otherwise unsuitable for the material they require, usually take only the prime parts of such trunks as they split. Twenty-four years ago, in a short Report by Mr. W. E. Ivey, which was printed and laid before Parliament, attention was called to the gross waste of first-class trees then caused by splitters in the Victoria reserves,* but no effective steps were taken to prevent the destruction complained of, and, with little alteration, the same methods of exploiting the forest are in full force to-day. During our recent visit to Toolangi, one splitter, in the course of his evidence, stated that he might, in some parts of the reserves, fell, and afterwards reject as unfit for palings, 70 trees out of 100, while in other parts the average number of unused trees would be 30 per cent. The waste of timber in the trees actually used he estimated at one-fifth, or 20 per cent. It was also elicited during the examination that licences are not taken out regularly by some splitters, who consider that they are not likely to be disturbed in illegal timber cutting, or called to account by a forest inspector or police bailiff during the infrequent visits of these officers to the district.

At present splitters are at liberty to roam over the forest at will, on payment of a licence-fee of Ten shillings per quarter, and naturally they operate on small patches of specially-picked trees, leaving in each belt hundreds of mature free-grained trees untouched. We strongly recommend that the forest be divided into splitting areas or blocks, and that no splitter should be allowed to cut on a fresh block until the supply of suitable and accessible timber has, in the opinion of the responsible forest officer, been exhausted.

* The choice of trees is so great that only those best suited for splitting are used up after they are felled. Trees, the growth of centuries, are plentiful, are the property of the State, and cost nothing, and the result is to be witnessed in the vast number of the finest trees of the forest lying rotting upon the ground. In some instances not a paling has been taken from a tree which could hardly be matched out of this forest; in many others a single cut only has been taken, and it is only in rare cases that the whole butt has been used up. A liberal estimate of the ratio which the timber used bears to that wasted, calculated from the barrels alone, gave the proportion of about 1 to 8.—W. E. Ivey, in *Report of Secretary for Agriculture, 1874.*

With regard to saw-mill licences, a number of which have been applied for in the Warburton district, we consider that the operations of the fellers employed by each mill-owner should be strictly confined to an area not exceeding 4 square miles, the basis of measurement being the mill site or other suitable point according to the distribution of accessible milling timber, and that all licences issued in connexion with the Victoria Forest should contain a condition to this effect. When, in the opinion of the forester, the milling timber within this area is exhausted or is inaccessible for profitable working, but not till then, a new area should be allotted.

As a first step to bring the forest under proper control, we recommend the immediate appointment of an active and experienced forester, whose duty it will be to regularly patrol the reserves, to ascertain that all timber-getters hold proper licences and permits, to see that no feller or splitter shall enter on new belts of timber till the block on which he is authorized to cut is exhausted of suitable and accessible trees, and, as far as possible, to prevent any undue waste of material. As regards the lath and paling splitters, we consider that all new licences should bear a condition that any undue waste of useful timber in the course of their work, if persisted in after notice in writing from the forester in charge, will render them liable to have their permits suspended for a period not exceeding one month.

The Fixed Licence System.

In the course of our investigations we have been much impressed with the unsatisfactory working of the fixed licence system, which is still in force in most of the reserves for sawn and split timber. It has been condemned as inherently bad—unfair to the State as well as to timber-getters—by all competent observers who have examined and reported on our forests, among others by the Central Forest Board in 1874, by Mr. Vincent in the able and exhaustive Report which he prepared for the Government of the day in 1887, and by Mr. B. Ribbentrop, Inspector-General of Forests in India, in 1895.

There is no doubt that the royalty system—a scale of Crown dues levied on the quantity of sound timber actually cut, and based on its market value—is the fairest and most equitable plan of charging for forest produce. It has been in force in Canada and British India for a long period, in New South Wales for several years, and in New Zealand since January last. In this colony the operation of the system is chiefly confined to reserves near the central gold-fields for the extraction of mining timber and fuel, the only forests where it is applied to sawn timber being the redgum reserves of Barmah and Gunbower. It has lately been established with good results in the Heathcote Forest for mining timber, ordinary split timber, and fuel, the supplies of milling timber there being exhausted. In addition, all hewn railway sleepers, which are chiefly cut in reserves stripped of milling timber, are subject to royalty.

To enforce royalty rates in practically exhausted forests like Wombat, Creswick, and Maryborough, and at the same time to permit the fixed licence system to remain in force in magnificent virgin timber lands like those in the Victoria and Otway Forests, would be a very unwise policy. In framing a scale of royalty charges the great object in view should be to fix such reasonably low rates as will not hamper the timber-cutting industry or encourage the importation of material, such as sawn hardwood and palings, from other colonies. New South Wales, it may be mentioned, obtains a royalty of 9d. to 1s. 3d. per 100 super. feet from her best hardwoods, such as ironbark, tallow wood, redgum, and blackbutt, the average basis being one-tenth of the market value of the dressed timber. New Zealand charges 2s. per 100 super. feet for totara, matai, and puriri, 1s. for Kauri pine, and 6d. for red pine (rimu) and white pine. The New South Wales rates are much higher than the royalty on redgum now in force in this colony (6d. per 100 super. feet).

We shall be prepared early in the coming year to deal fully with this question in a special Report, and in the meantime we recommend that all new licences granted in connexion with the Victoria (and also the Otway) Forest shall bear a condition that they are issued subject to the right of the Crown to impose royalty charges, in lieu of the fixed fee for a specified term, at any time during the currency of the permits.

Summarized, the recommendations made in this Report are as follows :—

1. The permanent reservation of the forest areas in the counties of Evelyn, Anglesey, and Wonnangatta, specified on page 4, amounting to 291,200 acres.
2. The advisableness of steps being taken to bring the eastern and western portions of the forest within railway communication of the Healesville line, in view of the increasing dearth of timber in the central mining districts.
3. The immediate appointment of an active and experienced forester, in order to insure proper supervision of the reserves.
4. The restriction of saw-millers and all timber cutters to prescribed areas in the forest, and more efficient control over the operations of lath and paling splitters.
5. The indorsement of all new licences issued in connexion with the Victoria Forest (and also the Otway reserves) with a condition that the Crown may impose royalty rates, in lieu of fees for a specified term, at any time during the currency of such licences.

A. L. TUCKER, President.
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Parliament House,
 Melbourne, 8th December, 1898.